REMARKS

Claims 1, 11, and 21 have been amended.

Claims 1 – 30 are present in the subject application.

In the Office Action dated May 18, 2006, the Examiner has rejected claims 1 – 30 under 35 U.S.C. §102(b). Favorable reconsideration of the subject application is respectfully requested in view of the following remarks.

The Examiner has rejected claims 1 – 30 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 4,956,774 (Shibamiya et al.). Briefly, the present invention is directed toward enhancing the access path selection process by storing the relevant frequency distribution and the host variable values used for selecting the access path together with the corresponding access path executable. This way, the host variables impact to the access path can be inexpensively assessed and the re-optimization triggered only if necessary.

The Examiner takes the position that the Shibamiya et al. patent discloses all the features within these claims.

This rejection is respectfully traversed since the Shibamiya et al. patent does not disclose, teach or suggest determining whether to regenerate the preferred access path for use with a subsequent execution of the same query based upon a comparison of information related to the values of the variables within the queries as recited in the claims. However, in order to expedite prosecution of the subject application, independent claims 1, 11 and 21 have been amended and recite the feature of regenerating the preferred access path for the query in response to the comparison indicating that the information related to the second value (e.g., for each query variable used for a subsequent execution of the query) differs sufficiently from stored

information related to the first value (e.g., for each query variable used in a prior execution of that same query) to enable generation of an access path different than the preferred access path.

The Shibamiya et al. patent does not disclose, teach or suggest these features. Rather, the Shibamiya et al. patent discloses a method for more accurately estimating the time required to process a database query using a selected index. A preferred embodiment consists of two major phases. In the collection phase, frequency of occurrence statistics for the most frequent values are collected and saved for each of the database systems indexes in a system catalog. This collection is initially done after each table has been initially populated (loaded) with records and indexed. Since there are usually several possible alternative access paths for each query, the bind phase includes an optimizer to select the best access path for the query. In the second phase, the collected statistics saved in the system catalog are utilized by the optimizer during the bind process to estimate the time required to use each of the various access paths available to satisfy each query. The accurate estimates provided allow the optimizer to reliably select the best access path for each query (e.g., See Fig. 1; Column 4, lines 60 - 63; and Column 5, line 15 to Column 6, line 15).

Thus, the Shibamiya et al. patent discloses the optimizer being utilized to select an access path during the bind phase or process (e.g., prior to execution as shown in Fig. 1), as opposed to generating a preferred access path at execution time as recited in the independent claims. Further, the Shibamiya et al. patent collects frequency of occurrence statistics to determine a time estimate for each access path associated with a query, and selects the access path based on the time estimates. There is no disclosure, teaching or suggestion of comparing information related to values of variables within different executions of the same query or, for that matter,

regenerating the access path in response to sufficient differences between that information enabling generation of a different access path as recited in the independent claims.

Since the Shibamiya et al. patent does not disclose, teach or suggest the features recited in independent claims 1, 11 and 21 as discussed above, these claims are considered to be in condition for allowance.

Claims 2 – 10, 12 – 20 and 22 - 30 depend, either directly or indirectly, from independent claims 1, 11 and 21, respectively, and therefore, include all the limitations of their parent claims. These dependent claims are considered to be in condition for allowance for substantially the same reasons discussed above in relation to their parent claims and for further limitations recited in the dependent claims.

The application, having been shown to overcome the issues raised in the Office Action, is considered to be in condition for allowance and a Notice of Allowance is earnestly solicited.

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Delivered: 08/09/2006